What Is Claimed Is:

1. A method for controlling rippling caused by optical proximity correction during an optical lithography process used in manufacturing an integrated circuit, comprising:

selecting an evaluation point for a given segment that is part of an edge in a layout of the integrated circuit;

selecting at least one supplemental evaluation point for the given segment;

computing a deviation from a target location for the given segment at the evaluation point;

computing a supplemental deviation for the given segment at the at least one supplemental evaluation point;

adjusting a bias for the given segment, if necessary, based upon the deviation at the evaluation point;

calculating a ripple for the given segment based upon the deviation at the evaluation point and the supplemental deviation; and

if the ripple for the given segment exceeds a threshold value, performing a ripple control operation.

2. The method of claim 1, further comprising adjusting the bias again, if necessary, and performing the ripple control operation, if necessary, for each segment that is part of the layout of the integrated circuit.

3. The method of claim 1, wherein prior to selecting the evaluation point for the given segment, the method further comprises:

receiving a specification of the layout; and

dissecting edges in the layout into segments for optical proximity correction purposes.

4. The method of claim 1, wherein performing the ripple control operation involves performing a refinement operation that involves:

selecting additional dissection points for the edge that cause the given segment to be divided into multiple segments;

selecting additional evaluation points for the multiple segments;

selecting additional supplemental evaluation points for the multiple segments; and

adjusting the bias, if necessary, and performing the ripple control operation, if necessary, for each of the multiple segments.

5. The method of claim 4, wherein selecting additional evaluation points involves using supplemental evaluation points as the additional evaluation points.

6. The method of claim 1, wherein performing the ripple control operation involves performing a regeneration operation that involves:

changing the location of dissection points for the edge to cause the edge to be divided into a different set of segments; and

adjusting the bias, if necessary, and performing the ripple control operation, if necessary, for each segment in the different set of segments.

7. The method of claim 6, wherein changing the location of the dissection points involves swapping dissection points and evaluation points for the edge.

8. The method of claim 1, wherein performing the ripple control operation involves controlling the bias for the given segment so that the ripple for the given segment does not exceed the threshold value, wherein as a consequence of controlling the bias a critical dimension for the given segment may not meet specification.

9. The method of claim 1, wherein computing the deviation for the given segment involves using a model-based technique for computing the deviation.

10. A computer-readable storage medium storing instructions that when executed by a computer cause the computer to perform a method for controlling rippling caused by optical proximity correction during an optical lithography process used in manufacturing an integrated circuit, the method comprising:

selecting an evaluation point for a given segment that is part of an edge in a layout of the integrated circuit;

selecting at least one supplemental evaluation point for the given segment;

computing a deviation from a target location for the given segment at the evaluation point;

computing a supplemental deviation for the given segment at the at least one supplemental evaluation point;

adjusting a bias for the given segment, if necessary, based upon the deviation at the evaluation point;

calculating a ripple for the given segment based upon the deviation at the evaluation point and the supplemental deviation; and

if the ripple for the given segment exceeds a threshold value, performing a ripple control operation.

11. The computer-readable storage medium of claim 10, wherein the method further comprises adjusting the bias, if necessary, and performing the ripple control operation, if necessary, for each segment that is part of the layout of the integrated circuit.

12. The computer-readable storage medium of claim 10, wherein prior to selecting the evaluation point for the given segment, the method further comprises:

receiving a specification of the layout; and

dissecting edges in the layout into segments for optical proximity correction purposes.

13. The computer-readable storage medium of claim 10, wherein performing the ripple control operation involves performing a refinement operation that involves:

selecting additional dissection points for the edge that cause the given segment to be divided into multiple segments;

selecting additional evaluation points for the multiple segments;

selecting additional supplemental evaluation points for the multiple segments; and

adjusting the bias, if necessary, and performing the ripple control operation, if necessary, for each of the multiple segments.

14. The computer-readable storage medium of claim 13, wherein selecting additional evaluation points involves using supplemental evaluation points as the additional evaluation points.

15. The computer-readable storage medium of claim 10, wherein performing the ripple control operation involves performing a regeneration operation that involves:

changing the location of dissection points for the edge to cause the edge to be divided into a different set of segments; and

adjusting the bias, if necessary, and performing the ripple control operation, if necessary, for each segment in the different set of segments.

16. The computer-readable storage medium of claim 15, wherein changing the location of the dissection points involves swapping dissection points and evaluation points for the edge.

17. The computer-readable storage medium of claim 10, wherein performing the ripple control operation involves controlling the bias for the given segment so that the ripple for the given segment does not exceed the threshold value, wherein as a consequence of controlling the bias a critical dimension for the given segment may not meet specification.

18. The computer-readable storage medium of claim 10, wherein computing the deviation for the given segment involves using a model-based technique for computing the deviation.

19. An apparatus for controlling rippling caused by optical proximity correction during an optical lithography process used in manufacturing an integrated circuit, comprising:

a selection mechanism that is configured to,

select an evaluation point for a given segment that is part of an edge in a layout of the integrated circuit, and to

select at least one supplemental evaluation point for the given segment;

a deviation computing mechanism that is configured to,

compute a deviation from a target location for the given segment at the evaluation point, and to

compute a supplemental deviation for the given segment at the at least one supplemental evaluation point;

a bias adjustment mechanism that is configured to adjust a bias for the given segment, if necessary, based upon the deviation at the evaluation point; and

a ripple control mechanism that is configured to,

calculate a ripple for the given segment based upon the deviation at the evaluation point and the supplemental deviation, and to

perform a ripple control operation if the ripple for the given segment exceeds a threshold value.

20. The apparatus of claim 19, wherein for each segment that is part of the layout of the integrated circuit the bias adjustment mechanism is configured to adjust the bias, if necessary, and the ripple control mechanism is configured to perform the ripple control operation, if necessary.

21. The apparatus of claim 19, further comprising a dissection mechanism that is configured to:

receive a specification of the layout; and to

dissect edges in the layout into segments for optical proximity correction purposes.

22. The apparatus of claim 19, wherein while performing the ripple control operation, the ripple control mechanism is configured to:

select additional dissection points for the edge that cause the given segment to be divided into multiple segments;

select additional evaluation points for the multiple segments;

select additional supplemental evaluation points for the multiple segments;

adjust the bias, if necessary, for each of the multiple segments; and to

perform the ripple control operation, if necessary, for each of the multiple segments.

23. The apparatus of claim 22, wherein selecting additional evaluation points involves using supplemental evaluation points as the additional evaluation points.

24. The apparatus of claim 19, wherein while performing the ripple control operation, the ripple control mechanism is configured to:

change the location of dissection points for the edge to cause the edge to be divided into a different set of segments;

adjust the bias, if necessary, for each segment in the different set of segments; and to

perform the ripple control operation, if necessary, for each segment in the different set of segments.

25. The apparatus of claim 24, wherein changing the location of the dissection points involves swapping dissection points and evaluation points for the edge.

26. The apparatus of claim 19, wherein while performing the ripple control operation, the ripple control mechanism is configured to control the bias for the given segment so that the ripple for the given segment does not exceed the threshold value, wherein as a consequence of controlling the bias a critical dimension for the given segment may not meet specification.

27. The apparatus of claim 19, wherein the deviation computing mechanism is configured to compute the deviation for the given segment using a model-based technique.

28. A mask to be used in an optical lithography process for manufacturing an integrated circuit, wherein the mask is created through a process that controls rippling caused by optical proximity correction, the process comprising:

selecting an evaluation point for a given segment that is part of an edge in a layout of the integrated circuit;

selecting at least one supplemental evaluation point for the given segment;

computing a deviation from a target location for the given segment at the evaluation point;

computing a supplemental deviation for the given segment at the at least one supplemental evaluation point;

adjusting a bias for the given segment, if necessary, based upon the deviation at the evaluation point;

calculating a ripple for the given segment based upon the deviation at the evaluation point and the supplemental deviation;

if the ripple for the given segment exceeds a threshold value, performing a ripple control operation.

29. An integrated circuit created through a process that controls rippling caused by optical proximity correction during an optical lithography process used in manufacturing the integrated circuit, the process comprising:

selecting an evaluation point for a given segment that is part of an edge in a layout of the integrated circuit;

selecting at least one supplemental evaluation point for the given segment;

computing a deviation from a target location for the given segment at the evaluation point;

computing a supplemental deviation for the given segment at the at least one supplemental evaluation point;

adjusting a bias for the given segment, if necessary, based upon the deviation at the evaluation point;

calculating a ripple for the given segment based upon the deviation at the evaluation point and the supplemental deviation;

if the ripple for the given segment exceeds a threshold value, performing a ripple control operation.

30. A means for controlling rippling caused by optical proximity correction during an optical lithography process used in manufacturing an integrated circuit, comprising:

a selection means for,

selecting an evaluation point for a given segment that is part of an edge in a layout of the integrated circuit, and for

selecting at least one supplemental evaluation point for the given segment;

a deviation computing means for,

computing a deviation from a target location for the given segment at the evaluation point, and for

computing a supplemental deviation for the given segment at the at least one supplemental evaluation point;

a bias adjustment means for adjusting a bias for the given segment, if necessary, based upon the deviation at the evaluation point; and

a ripple control means for,

calculating a ripple for the given segment based upon the deviation at the evaluation point and the supplemental deviation, and for

performing a ripple control operation if the ripple for the given segment exceeds a threshold value.

31. A method for controlling rippling caused by optical proximity correction during an optical lithography process used in manufacturing an integrated circuit, comprising:

selecting a first evaluation point for a given segment that is part of an edge in a layout of the integrated circuit;

selecting a second evaluation point for the given segment;

computing a first deviation from a target location for the given segment at the first evaluation point;

computing a second deviation for the given segment at the second evaluation point; and

adjusting a bias for the given segment, if necessary, based upon multiple deviations at multiple evaluation points, including the first deviation at the first evaluation point and the second deviation at the second evaluation point.

32. The method of claim 31, wherein the second evaluation point is a supplemental evaluation point.

33. The method of claim 31, wherein both the first evaluation point and the second evaluation point are located on the given segment.

34. The method of claim 31, wherein the first evaluation point is located on the given segment and the second evaluation point is located on an adjacent segment.

35. The method of claim 31, further comprising adjusting the bias, if necessary, for each segment that is part of the layout of the integrated circuit.

36. The method of claim 31, further comprising:

selecting a third evaluation point for the given segment; and

computing a third deviation for the given segment at the third evaluation point;

wherein adjusting the bias for the given segment involves considering the third deviation at the third evaluation point.

37. The method of claim 31, wherein computing the first deviation involves using a model-based technique for computing the first deviation.

38. A computer-readable storage medium storing instructions that when executed by a computer cause the computer to perform a method for controlling rippling caused by optical proximity correction during an optical lithography process used in manufacturing an integrated circuit, the method comprising:

selecting a first evaluation point for a given segment that is part of an edge in a layout of the integrated circuit;

selecting a second evaluation point for the given segment;

computing a first deviation from a target location for the given segment at the first evaluation point;

computing a second deviation for the given segment at the second evaluation point; and

adjusting a bias for the given segment, if necessary, based upon multiple deviations at multiple evaluation points, including the first deviation at the first evaluation point and the second deviation at the second evaluation point.

39. The computer-readable storage medium of claim 38, wherein the second evaluation point is a supplemental evaluation point.

40. The computer-readable storage medium of claim 38, wherein both the first evaluation point and the second evaluation point are located on the given segment.

41. The computer-readable storage medium of claim 38, wherein the first evaluation point is located on the given segment and the second evaluation point is located on an adjacent segment.

42. The computer-readable storage medium of claim 38, wherein the method further comprises adjusting the bias, if necessary, for each segment that is part of the layout of the integrated circuit.

43. The computer-readable storage medium of claim 38, wherein the method further comprises:

selecting a third evaluation point for the given segment; and

computing a third deviation for the given segment at the third evaluation point;

wherein adjusting the bias for the given segment involves considering the third deviation at the third evaluation point.

44. The computer-readable storage medium of claim 38, wherein computing the first deviation involves using a model-based technique for computing the first deviation.

45. An apparatus for controlling rippling caused by optical proximity correction during an optical lithography process used in manufacturing an integrated circuit, comprising:

a selection mechanism that is configured to,

select a first evaluation point for a given segment that is part of an edge in a layout of the integrated circuit, and to

select a second evaluation point for the given segment;

a deviation computing mechanism that is configured to,

compute a first deviation from a target location for the given segment at the first evaluation point, and to

compute a second deviation for the given segment at the second evaluation point; and

a bias adjustment mechanism that is configured to adjust a bias for the given segment, if necessary, based upon multiple deviations at multiple evaluation points, including the first deviation at the first evaluation point and the second deviation at the second evaluation point.

46. The apparatus of claim 45, wherein the second evaluation point is a supplemental evaluation point.

47. The apparatus of claim 45, wherein both the first evaluation point and the second evaluation point are located on the given segment.

48. The apparatus of claim 45, wherein the first evaluation point is located on the given segment and the second evaluation point is located on an adjacent segment.

49. The apparatus of claim 45, wherein the bias adjustment mechanism is configured to adjust the bias, if necessary, for each segment that is part of the layout of the integrated circuit.

50. The apparatus of claim 45,

wherein the selection mechanism is additionally configured to select a third evaluation point for the given segment; and

wherein the deviation computing mechanism is additionally configured to compute a third deviation for the given segment at the third evaluation point;

wherein the bias adjustment mechanism is configured to consider the third deviation at the third evaluation point in adjusting the bias for the given segment involves.

51. The apparatus of claim 45, wherein the deviation computing mechanism is configured to compute use a model-based technique in computing the first deviation.

52. A mask to be used in an optical lithography process for manufacturing an integrated circuit, wherein the mask is created through a process that controls rippling caused by optical proximity correction, the process comprising:

selecting a first evaluation point for a given segment that is part of an edge in a layout of the integrated circuit;

selecting a second evaluation point for the given segment;

computing a first deviation from a target location for the given segment at the first evaluation point;

computing a second deviation for the given segment at the second evaluation point; and

adjusting a bias for the given segment, if necessary, based upon multiple deviations at multiple evaluation points, including the first deviation at the first evaluation point and the second deviation at the second evaluation point.

53. An integrated circuit created through a process that controls rippling caused by optical proximity correction during an optical lithography process used in manufacturing the integrated circuit, the process comprising:

selecting a first evaluation point for a given segment that is part of an edge in a layout of the integrated circuit;

selecting a second evaluation point for the given segment;

computing a first deviation from a target location for the given segment at the first evaluation point;

computing a second deviation for the given segment at the second evaluation point; and

adjusting a bias for the given segment, if necessary, based upon multiple deviations at multiple evaluation points, including the first deviation at the first evaluation point and the second deviation at the second evaluation point.

54. A means for controlling rippling caused by optical proximity correction during an optical lithography process used in manufacturing an integrated circuit, comprising:

a selection means for,

selecting a first evaluation point for a given segment that is part of an edge in a layout of the integrated circuit, and for

selecting a second evaluation point for the given segment;

a deviation computing means for,

computing a first deviation from a target location for the given segment at the first evaluation point, and for

computing a second deviation for the given segment at the second evaluation point; and

a bias adjustment means for adjusting a bias for the given segment, if necessary, based upon multiple deviations at multiple evaluation points, including the first deviation at the first evaluation point and the second deviation at the second evaluation point.